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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/766,736	01/22/2001	Edward J. Bortolini	Bortolini	1298
24283	7590	06/16/2006	EXAMINER	
PATTON BOGGS 1660 LINCOLN ST SUITE 2050 DENVER, CO 80264			RAMAN, USHA	
			ART UNIT	PAPER NUMBER
			2623	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/766,736

Applicant(s)

BORTOLINI ET AL.

Examiner

Usha Raman

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1, 6 and 11-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 11-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments with respect to claim 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Objections***

2. Claim 6 objected to because of the following informalities: the last paragraph in claim 6 contains repeat the limitation, "said step of exclusively converting data...digital base-band IP format", twice. Applicant is advised to revise and correct appropriately.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 21-24 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "said primary hubs" and "said secondary hubs" in line 1 of the last paragraph. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 6, 11-24 rejected under 35 U.S.C. 102(e) as being anticipated by Amit (US Pre Grant Pub. 2002/0093970)

In regards to claims 1, 6, 11, and 15, Amit discloses a broadband CMTS for managing data transmissions through a broadband network (see figure 2 and [0005]) that interconnects a plurality of end user locations (12) that are connected on a first side of the network, and a headend (14) via a cable modem (located at primary hubs, secondary hubs, fiber node; see [0026]) that is connected to a second side of the network, the broadband network comprising a hierarchical network having at least two levels, the broadband cable modem termination system comprising:

Downstream broadband cable modem component means (i.e. IC 142 of cable modem located in primary hub) located at a first level of the hierarchical network which is proximate to the second side of the network (CMTS located in primary hub PH), comprising:

Means for exclusively converting data (138) that is received in the digital base band IP format from a source of program material located at the headend to data in a RF based format for transmission to selected ones of plurality of end user locations. See [0027] and figure 4.

Means for transmitting data (134) in said radio frequency based format exclusively through said network to selected ones of plurality of end user

locations (i.e. downstream data is transmitted exclusively through the network to the end user locations).

Upstream broadband cable modem component means (i.e. IC 144 of cable modem located in fiber node 16, which is connected to the secondary hub 22) located at a second level of hierarchical network, which is proximate to a first side of the network, comprising:

Means for exclusively converting data (140) that is received in a RF based format from selected ones of plurality of end user locations, to a digital base band IP format for transmission to headend. See [0028].

Means for transmitting data (136) the data in digital base band IP format exclusively through the network to the headend (i.e. upstream data is transmitted exclusively in an upstream direction through the network to the head end).

Wherein the first level (level at primary hub) and second level (level at secondary hub) are different levels in the hierarchical network, and the means for exclusively converting data from digital base band IP format to data in a RF based format is at a different location (i.e. the transmitter component of cable modem in primary hub) from the means for exclusively converting data from a RF based format to a data in digital base band IP format (i.e. the receiver component of cable modem in fiber node). See network infrastructure in figure 2 and [0026].

In regards to claims 12, 16, 19 and 22, the plurality of end user locations (12) are served by a passive fiber node (16) which serves to interconnect the plurality of

end user locations to a secondary hub, the upstream (secondary hub) broadband cable modem component means is located in the passive fiber node (see [0005] and [0026]).

In regards to claims 13, 17, 20, and 23, the means for exclusively converting data received in a RF frequency based format comprises means for converting radio frequency based format data from a DOCSIS IP format to a digital base band IP format data. See [0002], [0006].

In regards to claims 14, 18, 21, and 24, the means for exclusively converting data received in digital base band IP format comprises means for converting digital base band IP format to DOCSIS IP data. See [0002], [0006].

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from


the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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